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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,280	12/11/2000	Stephen Ma	2705-78	3592

7590 12/28/2004  
Marger Johnson & McCollom, P.C.  
1030 SW Morrison Street  
Portland, OR 97205

EXAMINER

HO, DUC CHI

ART UNIT PAPER NUMBER

2665

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/735,280

Applicant(s)

MA ET AL.

Examiner

Duc C Ho

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-16 is/are allowed.
- 6) ☒ Claim(s) 1,6,17,18 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 19-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 1, 6, 17-18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in figure 2 of the instant application, in view of Partridge et al.(US 6,160,811), hereinafter referred to as Partridge.

Regarding claim 1, the admitted prior art in figure 2 of the instant application discloses a high-level block diagram of a Network Access Server.

*examining, using a first processor (the forwarding engine 54-fig. 2 examines, see the disclosure of the instant application at page 9-line 17 to page 10-line 23) in the network access server, one or more header fields from one or more headers of a received egress packet (a packet being received at one of the modular boards-fig. 2 is to be passed to the egress port of the Dial Shelf Controller 55-fig. 2 to the forwarding engine 58 via a FE hub 54 and the FE connector 57-fig. 2).*

The admitted prior art in figure 2, however, does not disclose expressly (1) determining, based on the examination of the header fields, a second processor responsible for processing that egress packet, the second processor selected from a plurality of forwarding processor in the network access server, and (2) passing the egress packet to the second processor.

Partridge discloses a data packet router. Referring to figure 1, the network processor 39-fig. 2 determines which forwarding engine (FE 33-35) is to read headers of packet coming into a TSU from the outside world, and to update the header for transmission out of the router, and sent to the selected forwarding engine the packet (corresponding to 1-2).

One skill in the art would recognize the advantage of using at least a forwarding engine (a second processor) for processing the packets out of the router without being concerned about the protocols of outgoing data link such that to improve greatly the speed of the router's operation.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine figure 2 of the admitted prior art with Partridge.

The suggestion/motivation for doing so would have been to improve greatly the speed of the router's operation.

Therefore, it would have been obvious to combine Partridge with the admitted prior art in figure 2 of the instant application to obtain the invention as specified in claim 1.

Regarding claim 6, please see the rejection of claim 1. A layer-2 Ethernet header is encapsulated to the incoming packet from the module of the admitted prior art in figure 2 before passing the packet to the forwarding engine of Partridge for routing the packet.

Regarding claim 17, this claim has similar limitations as claim 1. Therefore, it is rejected under the admitted prior art in figure 2 of the instant application and Partridge for the same reasons set forth in the rejection of claim 1. In Partridge the selected forward engine-fig. 1 forwards the received egress packet to the access network port 62.

Regarding claim 18, please see the rejection of claim 1. The FE hub 54-fig. 2 of the admitted prior art preparing the ingress packet. The forwarding engine-fig. 1 of Partridge is used for transmitting the packet out of the server, and toward a packet data network port 62-fig. 2 of the admitted prior art.

Regarding claim 23, this claim has similar limitations as claim 6. Therefore, it is rejected under the admitted prior art in figure 2 of the instant application, and Partridge for the same reasons set forth in the rejection of claim 6.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 6, 17-18, and 23 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

5. Claims 7-16 are allowed.
6. Claim 2-5, and 19-22 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (703) 305-1332. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 703-308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

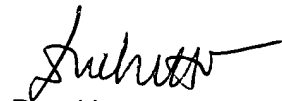
8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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9. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington. VA, Sixth Floor (Receptionist).

Patent Examiner

A handwritten signature in black ink, appearing to read 'Duc Ho', with a long horizontal stroke extending to the right.

Duc Ho

12-20-04